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Observations on distribution of *Athis palatinus* *staudingeri* (Druce, 1896) (Lepidoptera: Castniidae)

R. Vinciguerra & J. M. Gonz lez

Abstract

Athis palatinus staudingeri (Druce, 1896) originally described from Panama is reported from Costa Rica, based on the discovery of two male specimens, thus increasing its geographical distribution. Additional information on the genus, and on congeneric species/subspecies is provided.

KEY WORDS: Lepidoptera, Castniidae, *Athis palatinus staudingeri*.

Note sulla distribuzione di *Athis palatinus staudingeri* (Druce, 1896) (Lepidoptera: Castniidae)

Riassunto

Athis palatinus staudingeri (Druce, 1896), originariamente descritta di Panama,   riportata anche per il Costa Rica sulla base del ritrovamento di due esemplari maschi ampliando le conoscenze relative alla sua distribuzione geografica. Sono fornite, altres , informazioni supplementari sul genere e le specie/sottospecie affini.

PAROLE CHIAVE: Lepidoptera, Castniidae, *Athis palatinus staudingeri*.

Observaciones sobre *Athis palatinus staudingeri* (Druce, 1896) (Lepidoptera: Castniidae)

Resumen

La subespecie *Athis palatinus staudingeri* (Druce, 1896), originalmente descrita de Panam , se cita para Costa Rica sobre la base de dos ejemplares machos, ampliando as  el  rea de distribuci n geogr fica del tax n. Se incluye informaci n adicional sobre el g nero y las especies/subespecies afines.

PALABRAS CLAVE: Lepidoptera, Castniidae, *Athis palatinus staudingeri*.

Introduction

The genus *Athis* H bner, [1819] 1816 is the largest of the family Castniidae and includes either fourteen or fifteen species (LAMAS, 1995; MILLER, 1995). The species of this Neotropical genus are distributed in Mexico, Central and South America, with at least three species found in the Caribbean islands, including the endemic *Athis pinchoni* (Pierre, 2003), from Martinique (GONZ LEZ & COCK, 2004; GONZ LEZ *et al.*, 2006; LAMAS, 1995; MILLER, 1995; PIERRE & PIERRE-BALTUS 2003; PIERRE *et al.*, 2008). Curiously enough a specimen of *Athis inca orizabensis* (Strand, 1913), deposited in the Field Museum of Natural History, Chicago (from the Herman Strecker collection that was originally in Tryon Reakirt's collection) has a label stating that

it came from “Cuba” (GONZÁLEZ *et al.*, 2010). Even though it is possible that some pupae, inside plant material from Veracruz, were brought to Cuba and eventually emerged on the island, where Reakirt's specimen was eventually collected, there is a greater probability that either Reakirt or Strecker mislabeled that specimen (GONZÁLEZ *et al.*, 2010).

The adult of all *Athis* species is characterized, generally, by triangular brown forewings (with darker basal area) with two or three hyaline spots located in the sub-apical area. The hind wings are brightly colored, and sometimes species exhibit a faint transversal band that extends parallel to the outer margin. The adults appear to have predominantly diurnal habits.

Only few species are well represented in museums and/or private collections, and the information on their eco-ethology and distribution is, in general, very scarce. MILLER (1972; 1986) provides information on the systematics and biogeography of *Athis*, mainly of the *inca* group. Patterns of distribution and comments on the biology, ecology and hosts of the *Athis* species found in Venezuela were discussed by GONZÁLEZ (2004). Some taxa, like *Athis thysanete* (Dyar, 1912), are known only from sporadic records and their systematic status remains somehow doubtful. Other studies have added to the information available on *Athis fusciorubra* (Houlbert, 1917) which has been found not only in continental South America but also on the island of Trinidad (GONZÁLEZ & COCK, 2004). Other works have dealt with the group and provide some supplementary information on several species (GONZÁLEZ, 2008; GONZÁLEZ & FERNÁNDEZ YÉPEZ, 1992; GONZÁLEZ & HERNÁNDEZ-BAZ, 2011; GONZÁLEZ *et al.* 2006, 2008, 2010; PIERRE & PIERRE-BALTUS, 2003; PIERRE *et al.*, 2008; SANDOVAL *et al.* 2008).

Data recorded from recently collected specimens of *Athis palatinus staudingeri* (Druce, 1896) is provided herein, and compared to other species/subspecies. The specimens are deposited in R. Vinciguerra's private collection (Palermo, Italy).

Material examined

Athis palatinus staudingeri (Druce, 1896)

1 ♂; Costa Rica, Corcovado, 6-VI-2010 (local collector leg.); 1 ♂; Costa Rica, Corcovado, V-2009 (local collector leg.).

Athis palatinus is a polytypic species that, according to LAMAS (1995), contains six different subspecies: *Athis palatinus palatinus* (Cramer, 1777), *A. p. axaqua* (González & Fernández, 1992), *A. p. ferruginosa* (Lathy, 1922), *A. p. palatinoides* (Houlbert, 1917), *A. p. pallida* (Lathy, 1922) and *A. p. staudingeri* (Druce, 1896).

Even though originally described from Suriname, *Athis palatinus palatinus* appears to be distributed from Mexico to Peru and southern Brazil, including a population in Trinidad where adults have been seen feeding on flowers of *Warscewiczia coccinea* (Rubiaceae) (GONZÁLEZ, 2004; GONZÁLEZ & COCK, 2004; GONZÁLEZ & SALAZAR, 2003; LAMAS, 1995; MILLER 1986, 1995).

The status of *A. p. axaqua* has been discussed by GONZÁLEZ (2004) who considers it not a subspecies but a valid species. *Athis axaqua* is commonly found in northern and southwestern Venezuela and has also been found on the Venezuelan island of Margarita; their larvae are associated with *Tillandsia* and *Billbergia* plants (Bromeliaceae) (GONZÁLEZ *et al.*, 2006).

Athis palatinus ferruginosa appears to be the most common taxon of the group found in Peru, but *A. p. palatinoides* is also found in this country, as well as in Brazil (LAMAS, 1995; MILLER, 1986, 1995).

Athis palatinus pallida was originally described from Trinidad based on only two males but the characters given by LATHY (1922) were insufficient to consider it as a different subspecies and it was placed as a synonym of *A. p. palatinus* (Cramer, 1777) (GONZÁLEZ & COCK, 2004).

Athis palatinus staudingeri was described by DRUCE (1896) as *Castmia staudingeri*. MILLER (1995) regarded it as a valid species (as *Athis staudingeri*) but LAMAS (1995) placed it as a subspecies of *palatinus*. This is a taxon of considerable size when compared with its congeneric

species/subspecies. It was described from a presumably unique female specimen collected in Panama (Chiriquí) (DRUCE, 1881-1900, 1896) which was deposited in the Staudinger collection, now in the Museum für Naturkunde, Berlin (A. Giusti, pers. comm.). However, not much is known of this taxon, which is poorly represented in collections. Most of the specimens known to us have been found in Chiriquí Province, and at least one is from the Piña region, both localities in Panama. Based on the discovery of two males specimens from Costa Rica (Corcovado), the geographical distribution of this subspecies is increased herein.

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